

Explanatory notes for retaining digitised local authority records in electronic form only



INTERNAL AFFAIRS



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1. Introduction

Under the [Electronic Transactions Act 2002](#) (ETA) a legal requirement to retain information can be met by retaining the information in electronic form only.

Digitisation is a method of converting information from an original (often paper, but including other non-electronic formats) source to an electronic form.

Under the ETA the digitised (electronic) form may be retained in place of the source, providing that the electronic form is functionally equivalent to the original source record and there is no legal requirement to retain the original.

Disposal of the original source form of digitised local authority records - including protected records - does not need to be authorised under the [Public Records Act 2005](#) (PRA).

Protected records are the classes of local government records declared to be protected by the Chief Archivist, as outlined in the [Local Government Schedule](#).

The Association of [Local Government Information Management \(ALGIM\)](#) retention and disposal schedule (module T2) also includes the protected records covered by the Local Government Schedule.

The ALGIM schedule explains that local authorities do not need the Chief Archivist's permission to destroy the source record after digitisation. This schedule correctly reflects the legal situation – in particular, the interaction between the PRA and the ETA.

Protected records cannot be destroyed without the Chief Archivist's permission.

If the electronic form of the record is functionally equivalent to the source form, and there is no legal requirement to retain the source form of the record, local authorities may then choose to destroy the source record with certain exceptions.

Authorisation under the PRA to destroy the source form of the electronic form of a protected record is not required. The electronic form of a protected record will require authorisation for disposal under the PRA.

2. Purpose

These Notes outline to local authorities what they need to know in relation to the ETA and the recommendations made by the Chief Archivist that are included in the [Authority](#). These Notes explain the following:

- The role of the Chief Archivist under the ETA.
- The ETA requirements for functional equivalence.
- What the Chief Archivist's expert advice on functional equivalence is, including the role of the Digitisation Standard [AS/NZS ISO 13028: 2012 Information and documentation – Implementation guidelines for digitization of records](#).
- Detailed explanations regarding recommended exclusions from the scope of the *Authority*.

The Chief Archivist supports digitisation of local authority records (including protected records) as a means of:

- Improving the efficiency of business processes.
- Improving the delivery of services to the public and meeting public expectation of conducting business electronically.
- Improving access to, and the reusability of, information contained in protected records.
- Providing transition from a paper-based or hybrid recordkeeping environment to an electronic recordkeeping environment.

3. Who should read these Notes

These Notes should be read by:

- Staff in local authorities responsible for authorising and controlling the retention and disposal of public records.
- Owners of digitisation-enabled business processes or business owners of digitisation and digitisation projects.
- Risk assurance and compliance managers.
- Legal counsel and advisors.

4. Decision-making workflow for disposing of the source record

1. Is there a legal requirement that cannot be met electronically?

Yes → retain the source record

No → go to 2

2. Do the records in their original source form have intrinsic, monetary, aesthetic, or cultural value; or were created before 1946?

Yes → the Chief Archivist strongly recommends retaining the source record

No → go to 3

3. Are the digitised records functionally equivalent?

Yes → digitised in accordance with [AS/NZS ISO 13028: 2012](#)

No → retain the source record

4. Any other risks of retaining digitised records in electronic form and destroying the source form of the record?

Yes → the risk is unacceptable → retain the source record

No → the risk is acceptable → go to 5

5. Destroy the source record

→ Senior responsible officer authorises destruction

→ Short-term retention of source record after digitisation

→ Destruction of the source record documented in accordance with the Disposal Standard

5. Digitisation toolkit – related documents

These Notes are part of the Archives New Zealand digitisation toolkit, which includes the following related documents:

Title	Type	Coverage	Mandate
AS/NZS ISO 13028:2012 Information and documentation – Implementation guidelines for digitization of records	Standard (discretionary)	Public offices and local authorities	Public Records Act 2005
Authority to retain digitised public records in electronic form only	Legal instrument	Public offices <i>(informative for local authorities)</i>	Electronic Transactions Act 2002
Explanatory notes for retaining digitised public records in electronic form only	Guide	Public offices	
Technical specifications for digitisation	Technical specifications	Public offices and local authorities	
Checklist: Destruction of source records after digitisation	Checklist	Public offices and local authorities	

6. Legal context

Electronic Transactions Act 2002

The purpose of the ETA is to facilitate the use of electronic technology, including the ability to retain information in electronic form only, unless there is another legal requirement to retain the original record.

The relevant section of the Act is quoted below:

25 Legal requirement to retain document or information that is in paper or other non-electronic form

- (1) A legal requirement to retain information that is in paper or other non-electronic form is met by retaining an electronic form of the information if—
 - the electronic form provides a reliable means of assuring the maintenance of the integrity of the information; and
 - the information is readily accessible so as to be usable for subsequent reference.
- (3) To avoid doubt, if information is retained in electronic form in accordance with subsection (1), the paper or other non-electronic form of that information need not be retained.

Legal requirement to retain

The provisions in Section 25(1) apply, with some exceptions (explained below), to every kind or class of information that must legally be retained.

Local authority protected records are subject to one, over-arching legal requirement to retain – the PRA.

Apart from the PRA, local authority records may be subject to other legal requirements to retain (eg, taxation law; labour law; etc).

[Section 40\(2\) and \(3\)](#) of the PRA constitute a legal requirement to retain protected records for s25(1) of the Electronic Transactions Act.

Retention in electronic form only

The ETA states that a legal requirement to retain a record can be met by retaining an electronic form of the record:

- If the electronic form is functionally equivalent to the original form of the record.
- There are no other legal requirements to retain the original form of the record.

The ETA does not compel organisations to retain information in electronic form only. This should only be done:

- Where there are clear benefits in doing so.
- Where the requirements of s25 (1) for functional equivalence are satisfied.
- Where other risks of retention in electronic form only have been identified and assessed, mitigations are in place, and the residual risk is acceptable to the organisation.

The Chief Archivist's role under the ETA

The Chief Archivist has a more generalised role under the ETA to provide expert advice to local authorities on how to create and maintain functionally equivalent digitised forms of protected records.

Under [Section 27 of the PRA](#), the Chief Archivist is the statutory provider of records management advice to local authorities. Accordingly, the Chief Archivist has issued the Digitisation Standard [AS/NZS ISO 13028: 2012 Information and documentation – Implementation guidelines for digitization of records](#).

Functional equivalence

Functional equivalence means that the digitised form of a record is able to ‘do the job’ of the original source record.

The requirements for functional equivalence are outlined in [s25\(1\) of the ETA](#) where it is indicated that the records concerned must:

- Give a reliable assurance of the maintenance of the integrity of the information; and
- Be readily accessible and usable in the future.

Standard for digitisation

The ETA does not specify how to achieve functional equivalence. The ETA is intentionally neutral regarding the technology and processes required to produce and maintain functionally equivalent records.

The Chief Archivist has a view on the requirements and has issued digitisation guidance for local authorities, including adopting of [AS/NZS ISO 13028: 2012 Information and documentation— Implementation guidelines for digitization of records](#).

In 2012, Standards Australia and Standards New Zealand adopted ISO/TR 13028:2010, Information and documentation – Implementation guidelines for digitisation of records as a joint standard, hence, AS/NZS ISO 13028:2012. ISO/TR 13028:2010 was itself based on Archives New Zealand’s former Digitisation Standard S6. Archives New Zealand has purchased a license which makes AS/NZS ISO 13028:2012 available for public sector organisations through the Standards New Zealand website. [Please follow the instructions on our website to access the Standard.](#)

AS/NZS ISO 13028: 2012 is the Chief Archivist’s expert advice to local authorities on how to create and maintain functionally equivalent digitised records.

The Chief Archivist cannot, however, assert or guarantee that digitising in accordance with AS/NZS ISO 13028:2012 enables a local authority to comply with s25(1) of the ETA.

In the Chief Archivist’s view, digitising in accordance with AS/NZS ISO 13028: 2012 reduces significantly a local authority risk of non-compliance with s25(1) of the ETA. It is strongly recommended that local authorities use this standard if they are planning and implementing digitisation capable of producing digitised records that meet the requirements of the ETA.

Assure the maintenance of the integrity of the information – what does this mean?

To meet this requirement the information must be complete and unaltered, except for endorsements or immaterial changes arising in the normal course or communication, storage or display ([see s17 of the ETA.](#))

The requirement to be “complete and unaltered” means that:

- The originality of the source is preserved. The digitisation needs to produce a faithful image of the record in the form that it was at the time of digitising. There should only be an acceptable range of alterations or enhancements to improve legibility or usability.
- The integrity of information is retained post-digitisation.

*The requirement to be “**complete**” means that the digitisation process:*

- Successfully digitises all the records within the range or aggregation that has been selected and presented for digitisation.
- Fully and accurately reproduces the essential information carried in the source. This means that:
 - Images are legible at a required level of detail. Consider what is the faintest element that needs to be legible?
 - All annotations, attachments and enclosures are captured.
 - Pages should be un-cropped and not skewed.
 - Colour is reproduced to the required extent. For instance, handwritten coloured annotations and maps marked with colour are essential information; although a coloured logo, letterhead or invoice may be less important.)
 - Image optimisation is at an acceptable level – only include essential enhancements that would distinctly render otherwise indistinct or faded elements in the source.

Quality assurance is an important part of this process. This means verifying that the quality (specified in quality controls and technical specifications) has been achieved and corrective action is taken where it is not. Issues to consider are the:

- Verification of visual integrity, including comparisons between the source and the digitised images.
- Verification that all documents have been captured, including those within a batch, within a file, or within an aggregation or class.
- Short-term retention of the source material in case re-scanning is required due to faults in the original scanning.
- Regular testing of scanners, including routine use of scanning targets to verify configuration settings and recalibration as required.

*The requirement to be “**unaltered**” means that:*

- The system in which the digitised records are captured, stored, and managed has adequate security and access controls to ensure the records remain inviolate (tamper-proof.)
 - Records can only be changed by users with appropriate privileges, and the changes must be logged. It is often presumed that image file formats are unalterable, compared with, for instance, word-processed documents. Images can, however, be altered with image editing software and, in some cases, there are valid reasons for this. The important consideration is that these interventions do not alter, obscure, or delete any of the original information.
 - Records can only be disposed of (including destruction) by authorised users with the appropriate system privileges. Disposal actions must be authorised and documented.

- A requirement for unalterable images can be met by creating and maintaining an inviolable Preservation Master. Derivative files can then be made from the masters. Any authorised adjustments are then performed on the derivatives.
- There are per record event histories or global audit trails, which log the usage of the record (create, read, update or edit, delete, dispose, etc), to the extent required. This metadata helps attest to the authenticity and reliability of the record and must be maintained for at least the same period as the image itself is retained.

Acceptable “**endorsements or immaterial changes**” arising in the normal course or communication, storage, or display include:

- Image optimisation or enhancements to improve legibility and quality.
- The creation or addition of metadata, including:
 - Descriptive and contextual metadata (recordkeeping metadata.)
 - Administrative or process metadata accrued during use of the digitised records (or the logging of auditable events.)
 - Technical metadata contained in the file which documents the particulars of the digitisation, including capture device, software, and operator.)
- Content indexing, such as optical character recognition (OCR) that enables full-text searches of image content.
- Electronic stamps, annotations, mark-up, or redaction. These are alterations (endorsements) to the record, although providing that it is readily apparent that these do not permanently or irreversibly obscure the original information, they are immaterial.
- Image manipulation, measuring, plotting, overlays, and similar functions in image viewers. This is a function of the viewing software that will not alter the underlying image.

Alterations that are not disposal

Altering a local authority protected record is a type of disposal under the PRA.

The alterations described in the previous section would not qualify as an “alteration” as a disposal action under the PRA.

An alteration, however, that caused a loss of information, either at the time of digitisation or subsequently, could constitute a form of disposal under the PRA. If this kind of disposal was unauthorised by the Chief Archivist it would also be illegal. Under the PRA the alteration of any record as a specific disposal action has to be approved by the Chief Archivist.

Useable for subsequent reference – what does this mean?

This requirement is similar to s17 in the PRA.

17 Requirement to create and maintain records

(3) Every local authority must maintain in an accessible form, so as to be able to be used for subsequent reference, all protected records that are in its control, until their disposal is authorised by or under this Act.

Digitisation software, technical specifications (especially file formats), and infrastructure used to create, store, render, and manage digitised records may significantly affect the usability of digitised records.

Useable means that digital records should be:

- Displayable in image viewers in subsequent generations of software, or in different software. The degree of visual integrity and fidelity may be variable, for example, multi-format document viewers may not render an image exactly like a dedicated viewer. It may be acceptable to lose some minor functionality (for example, formatting) but there should be no critical loss of information during rendering.
- Locatable and retrievable. Adequate, persistent and searchable descriptive metadata should be present in order to retrieve the records.
 - Both files and the accompanying metadata should be bound and managed in a relational database that underlies a business system. The related images should be stored in the same system. When images are retrieved, the metadata should automatically be retrieved with the request. In exactly the same manner, the retrieval of metadata should also be accompanied with the relevant image.
- Stored and managed in systems that are designated as approved, corporate repositories or information systems (including line-of-business applications; EDRMS, ECMS, or other content management systems; or shared drives.)
 - The system is operated and administered by skilled staff. Only authorised staff can dispose of records (including deletion.)
 - The system has been tested and proven to be reliable over several years or versions of software. The system logs activity to the detail required.
 - Provisioning of adequate storage for images and related metadata or data, in conjunction with the reliable operation of data protection (including backup and disaster recovery), consistent with normal, prudent IT practice.
 - Migrated to later versions of the initial capturing system and managed or imported into new systems. Migration should include the electronic file and related metadata or data.

Risk of non-compliance

The Chief Archivist cannot unequivocally assert that digitising in accordance with AS/NZS 13028:2012 guarantees compliance with [s25\(1\) of the ETA](#), although digitising under this standard meets the Chief Archivist's requirements as a regulator under the Act.

In many cases the only legal requirement to retain records is the PRA. It may be usual or prudent to retain records for business reasons, but there is no other legal requirement to retain them.

For some records there are also other non-PRA legal requirements to retain records. Regulators of those requirements or other parties with a role or interest in the ETA may have similar – or different – requirements for functional equivalence.

Although it should have significance for other parties, the Chief Archivist's expert opinion is only an opinion. The ETA assigns no special status to it, and at this stage it has not been either endorsed or challenged by either the courts or other parties with a vested interest in the ETA.

The courts could have taken a view of functional equivalence in instances where the evidentiary value of digitised records is questioned. To the best of the Chief Archivist's knowledge, however, there is no relevant precedent that clarifies the legal test for functional equivalence.

In reality, the risk of local authority non-compliance with s25(1) of the ETA is small if the office has implemented AS/NZS ISO 13028:2012 and other requirements from relevant Archives New Zealand standards.

Requirement to print digitised records

[Section 16 of the ETA](#) does not require anyone to use, provide, or accept information in electronic form without their consent.

There is, therefore, an ongoing obligation for local authorities to be able to print digitised records and provide them to anyone who requests the records in that form.

The printed form of a digitised record must also maintain the integrity of the information. Local authorities will need to assess their ability to print digitised records.

7. Exclusions and recommended exclusions from the Chief Archivist

Records excluded from the ETA

- Records required to be retained in their original, non-electronic form, that is, records excluded from s25 of the ETA by [s14\(2\)](#) of the [Schedule to that Act](#), or any other enactment.

There are legal requirements, set out in the Schedule to the ETA, which state that some record conditions cannot be met electronically. In other words, the information must be retained in the original record.

These are not the Chief Archivist's exclusions. The Chief Archivist, therefore, cannot discharge a legal requirement to retain this information by approving its retention in electronic form only.

Local authorities may digitise records excluded from the ETA, but the source record must be kept until the legal requirement to retain in the original is revoked or expires.

The onus is on each local authority to determine any requirement to retain the original record.

Local authorities must check the most recent version of the [ETA Schedule](#), obtain legal advice, or contact the agency or regulator who administers any exclusion.

The exclusions to the ETA may change. Presumably, the intent is to reduce the number of exclusions over time. Local authorities should regularly check for any exclusion that has been added or removed that may apply to their records.

The Chief Archivist will not be responsible in cases where local authorities have digitised and then destroyed the source record where there is a legal requirement to retain that record.

The Chief Archivist's recommended exclusions

- Records not digitised in accordance with the relevant requirements of AS/NZS ISO 13028:2012.
- Records that may not be able to fulfil their function in electronic form.
- Records with intrinsic or cultural value, including records of high value to Māori.
- Unique or rare records, or records with significant monetary value.
- All records created prior to 1946.
- Audio-visual and microfilmed records.

There are two reasons for the Chief Archivist's recommended exclusions:

(1) Digitisation may not be able to produce a functionally equivalent electronic form of the source record because either:

- Information in the source may not be fully and accurately captured during digitisation. It may then not fully and accurately render or display in electronic form.
- The digitisation process is not capable of producing functionally equivalent records.

(2) It may not be desirable for protected records to be retained in electronic form only, even if digitisation produces a functionally equivalent form of the source.

8. Advice and guidance

For further advice and guidance, please contact [Archives New Zealand](#).

Advice service

Archives New Zealand offers free, digitisation-related advice to agencies in the following areas:

- Retention and disposal of digitised records.
- Management of digitised records.
- Technical specifications for digital records and record management systems.
- Digital continuity.

Archives New Zealand can also peer review local authority digitisation documentation. This documentation review is limited to a high-level 'health check' for conformance with:

- The digitisation toolkit, including [AS/NZS 13028:2012](#) and the [Authority to retain digitised public records in electronic form only](#).
- Other related Archives New Zealand standards, including the [Digital Recordkeeping](#), [Disposal](#), and [Electronic Recordkeeping Metadata](#) standards.

A documentation review does not mean that Archives New Zealand:

- Endorses any vendor, hardware, or software referenced in the documentation;
- Discharges the agency obligations or responsibilities under any Acts, regulations, or standards not administered by the Chief Archivist.

Requests for advice can be sent to rkadvice@dia.govt.nz

